Process for navigating on a computer network
and facsimile machine for implementing the process.

BACKGROUND ART

In order to obtain the information he requires, the user of a PC connected to a computer network such as that of the INTERNET must be able to determine the address of the relevant server. Once connected, the server transmits back a presentation page with text and various zones each permitting, by clicking thereon with the mouse of the PC, another page of the same type to be called up, containing, for example, more detailed information on the subject presented in the zone selected by the mouse.

These zones thus make it possible to control rerouting of the call to various pages of the server and, in particular, to connect to another server depending on the information being sought. For this reason these zones for selection of other pages are called links, uniting the addresses of the servers to the subjects which they present therein even if the addresses thereof are not known.

The rerouting thus carried out by these links constitutes navigation between servers of the INTERNET.

This navigation, which may take considerable time, necessitates having a good perception of the context surrounding the link which will be selected in order to chose the most relevant of the subjects or pages proposed by the various servers. This is the reason why the page displayed on the screen of the PC comprises quite a large number of indications, text and image, to assist in choosing the following page.

However, the applicant has desired to be able to navigate on the INTERNET at least in order to determine the address of the most relevant server, using a device, such as a facsimile machine, having a screen of only limited size much too small to display an entire page. For this reason the applicant proposes his invention.

SUMMARY OF THE INVENTION

To this end, the invention firstly relates to a process of navigating on a computer network with a data processing device comprising, on the one hand, a screen smaller than the size of a server page which comprises information and zones for selecting other pages and, on the other hand, means for designating a zone of the screen, a process in which the selection zones are displayed on the screen to the exclusion of the information, and another page is called up by designating one of the displayed zones.

It is thus possible, with very basic means, to control the necessary reroutings by the selection zones, or links, in order to reach the relevant server and to know the address thereof. The information supplied by the server can be stored in the device and reconstructed by any visual or audible user-machine interface means, for example by scrolling on the screen.

If the data processing device comprises a printer the screen is advantageously artificially enlarged to the size of the server page by printing the whole thereof.

It is thus possible to edit a page, either during navigation in order to have a better grasp of the context of the selection zones, thus checking the relevancy of the information of the page to decide whether or not to pursue the navigation, or at the end of navigation in order to edit the relevant information.

The invention also relates to a facsimile machine for implementation of the process of the invention, comprising means for receiving pages of electronic information associated with means for page analysis, arranged to detect therein zones for selection of other pages and to supply them as a block to display means associated with means for designating a displayed zone and controlling means for calling a server of another page.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be better understood with the aid of the following description of a preferred embodiment of the process of the invention with reference to the attached drawing in which:

- Figure 1 is a block diagram of a facsimile machine connected to an INTERNET server for implementation of the process of the invention, and

- Figure 2 is a diagram illustrating the process.

In this case the computer network 1 for data transmission is the INTERNET and comprises servers such as those referenced 2 and 3.

DETAILED DESCRIPTION

The data processing device 5 is in this case a facsimile machine arranged to hold a dialogue with INTERNET servers and which is connected by a telephone line 7 to the INTERNET 1. It comprises a memory 50 for transmission of commands on the INTERNET 1 and for reception of server pages comprising information and zones for selecting other pages. The memory 50 controls, via a circuit 53 for conversion of the information received such as text or images in HTML format into pixels, a printer 54, which is provided in this case, and controls a screen 52 via a page analysis circuit 51.

A keyboard or control desk 55 is also provided to control, in particular, a circuit 57 for transmission of calls to the servers such as 2, 3 and for management of exchanges therewith in relation to the memory 50.

A keypad 56 is also provided having four navigation keys controlling a visible cursor on the screen 52; a mouse may also be provided.

Figure 2 illustrates the graphics aspects of the process. A hypertext or HTML format page 11 received from a server 2 or 3 called via the line 7, comprises information relating to the subject for which the server 2, 3 is consulted, as well as zones 12 for selection of other hypertext pages of the same server or, in a general manner, of other servers 2, 3. The zones 12 or links thus represent the addresses of the corresponding pages 121, 122, 123, 124 and 125 able to be called automatically by the user of the facsimile machine 5.

In accordance with the process of the invention the selection zones 12, excluding the information 13, are displayed on the screen 52 and another page 121 to 125 is called by designating one of the zones 12 displayed.

The five arrows F1 illustrate the function of the circuit 51 which analyses the current page 11 in order to locate thereon, according to the header symbols, the zones 12, in this case five zones, and to supply them to the screen 52 in order to display them as a block of data. The screen 52 in this case comprises four lines, each permitting one of the zones 12 to be displayed. The fifth zone 12 falling outside the screen 52 is illustrated in broken lines below the screen so that the zones 12 are scrolled in order for them all to be read since the total size of the zones exceeds that of the screen 52.

In order to select one of the displayed zones 12 the navigation keys 56 make it possible to displace a cursor from one line to another of the screen 52 and the keyboard 55 makes it possible to confirm the choice and activate the circuit 57 to call up the following page thus selected (arrow F2).

It is also possible to make provision for displaying fields for inputting data, such as passwords, fields which are associated, by the keys 56, with the keyboard 55, then serving to input the data of the field considered.

However, in order to be able to peruse the information 13, the keyboard 55 makes it possible to control a transition to an alternating mode, in which the screen 52 alternately displays the

zones 12 and a window, the size of the screen 52, scanning the page 11, the scanning being controlled by the keys 56.

Furthermore, the user can - at any moment - print (arrow F3) the current page 11 on the printer 54 or call up and print one of the following pages 121 to 125 under the control of the keyboard 55, the circuit 53 carrying out the conversion of the received information forming the page, including the zones 12, into a page in pixel format. The user can thus have a better perception of the context of his navigation and can keep a printed record of the information sought. In other words, the screen 52 is artificially enlarged to the size of the page 11 by printing the whole thereof.

The memory 50 also makes it possible, under the control of the keyboard 55, to store the address associated with the page displayed and thus to be able to call it up later.

Provision is also made that it is possible, using the keyboard 55, to input a request to recall a previous page 11, ie. the memory 50 retains the corresponding data and/or the address for access to the page. The keyboard 55 also makes it possible to request, under control of the circuit 57, repetition of the sending of a server page 11, for example, if this page has been affected by transmission errors. In the same way, the keyboard 55 makes it possible to stop a search currently in progress on the INTERNET 1.